INDIAN SCHOOL MUSCAT

Solved SAMPLE PAPER-4 –ANSWER KEY

1. Under monopoly firm produces a unique product which has no close substitute. Under monopolistic competition firms produce goods which are close substitutes. 1
2. Under perfect competition market price is constant and firm sell all the units at the same price.
3. When AP reaches maximum and constant MP=AP
4. B. 150 units
5. % change in price is -20%. Ed=-0.6

   Ed= %change in quantity / %change in price

   -0.6=%change in quantity / -20%

   %change in quantity=-20x-0.6=12%
6. Market equilibrium is a situation at which market demand is equal to market supply.

   Market demand is inversely related to price. Consumers want to maximize their satisfaction. Consumers demand more at a lower price and less at a higher price

   Market supply is directly related to price Sellers wants to maximize their profits. They sell more at a higher price and less at a lower price

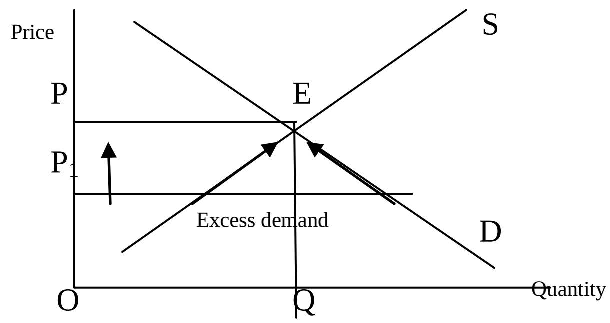
   Schedule

Market Price	Demand	Supply
5	10	50
4	20	40
3	**30**	**30 Equilibrium**
2	40	20
1	50	10

   OR

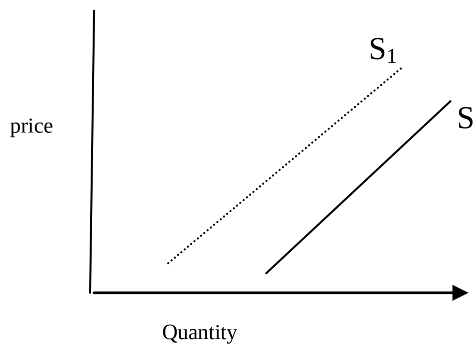
   If market price is below equilibrium, Quantity demanded is more than the quantity supplied. It creates an excess demand. Excess demand will push up the market price.

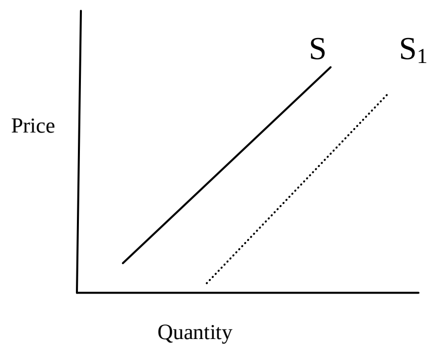
When price rises supply expands and demand contract. This process will continue till the equilibrium is reached where quantity demanded is equal to quantity supplied and the excess demand is wiped out.



7. A. Raw cotton is the input for cotton cloth. If price of raw cotton increases the input cost. Marginal cost increases. MC shift up to left. Supply curve will shift to left. Supply decreases. Less only can be supplied at the same prices

   B. Improvement in technology of production reduces marginal cost of production. Marginal cost curve shift down to right. Supply curve shift to right. Supply increases. More can be supplied at the same price.





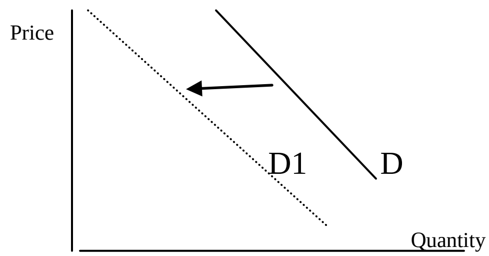
8.

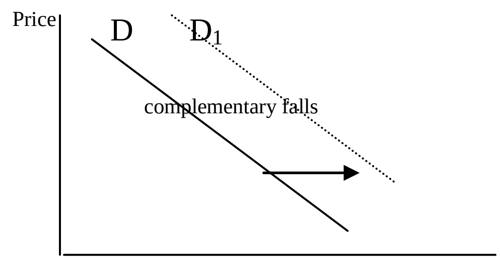
   a. Good A is substitute of good B if an decrease in price of good B decreases the demand for good A. These are used one in place of the other and provide the same satisfaction and can be used with same ease. Demand for a good will shift to right (increase) if price of its substitute rise and demand for a commodity will shift to left (decrease) if the price of its substitute decreases. E.g. demand for tea and price of coffee.

   b. A good is said to be complementary to B if an increase in price of good B decreases the demand for good A. Complementary goods are those goods which are demanded together to satisfy one want. Demand for good will decrease if price of complementary goods increases and vice versa. E.g. demand for car and price of petrol.

Diagram for substitute good

Diagram for complementary good.





9. **When MOC** is diminishing PPC is concave to the origin

   When MOC is increasing PPC is convex to the origin

   When MOC is constant PPC is straight line.

   It shows various combinations of two goods that can be produced with available technologies and with given resources, which are fully efficiently utilized

OR

Economic problems: Problems of making choices in the presence of scarcity of resources.

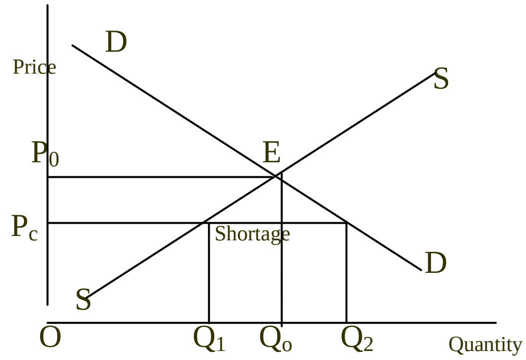
a. In a centrally planned economy, government or central planning authorities plan all important activities of the economy. All decisions related to production, exchange and consumption of goods and services are made by the government.

b. In a market economy (capitalist economy) all economic activities are organised through market. Free interaction of market forces of demand and supply will solve the economic problems.

c. In a mixed economy, some important decisions are made by the government in the public sector while economic activities are by and large conducted through the market in the private sector.

10. **Price ceiling and price floor.**

Price ceiling:- It is maximum allowable price for a good or service by the government. The government imposes an upper limit on price of a good is called a price ceiling. It is generally imposed on necessities to make the good available for the poor section also.



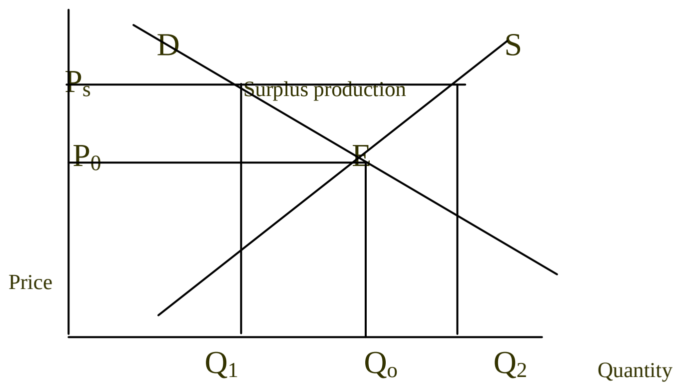
P is the equilibrium price at which DD=SS. If this price is too high for the poor section of the population, government fixes a ceiling price P. It has the following effects.

1. **Shortage** At a lower price m Pc demand increases to Q2, but supply falls to Q1. This will create a shortage of Q1 Q2 for the good ion the market.

2. **Ration coupons**:- In order to ensure the availability of the good equally to all government has to adopt rationing by giving a fixed quantity of the good to every one. Each consumer has to stand in a long queue to buy goods.

3. **Black marketing**:- Some consumers are willing to pay a higher price. This may create black marketing.

Price floor:-
It is the minimum price fixed by the government on certain good. Government fixes the minimum price in order to prevent the price falling from certain level so that the producers are assured of reasonable returns. This is also called price support programme.



P_o is equilibrium price at which demand=supply. If this price is too low for the producers so that they incur loss, government fixes a price floor or support price P_s. It has the following consequences.

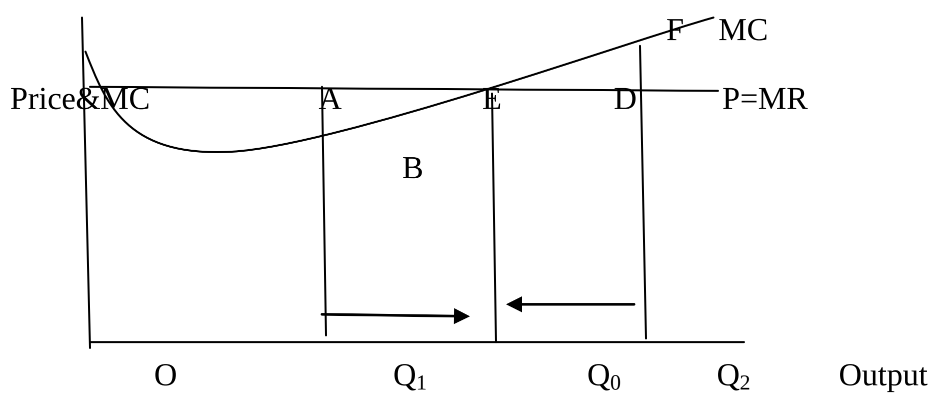
a. *Surplus production:-* At a higher price producers produce more but demand falls. This creates a surplus production equal to Q_1Q_2.

b. *Buffer Stock*:- In order to keep the support price government has to procure this surplus at the floor price. This lead to creation of buffer stock

c. *Problem of subsidies:-* Government buys the goods at the support price and sells at a lower price in the market. This price difference becomes subsidies. Government has to incur this cost of subsidies.

11. In perfect competition Market Price is constant so that it is equal to Marginal revenue. Market price becomes addition to total revenue from an additional unit of output produced.

If Market price is more than the marginal cost, addition to total revenue is more the addition to total cost when firm increases the output. Firms can increase profits by increasing output. Firm cannot be at equilibrium because it wants to increase the output.
If market price is less than the marginal cost, addition to total cost is more than the addition to total revenue by increasing the output. Profit falls by increasing the output. On the other hand if the firm reduces the output, decrease in total cost is more than the decrease in revenue. Firm can increase the profits by reducing the output Firm cannot be at equilibrium because it wants to reduce the output.
This means that firm can make maximum profit when market price is equal to marginal cost and firm is at equilibrium when it produces a level of output when market price is equal to marginal cost.



At Q_1 output MP is more than the MC. Firm increases Output. By increasing the output to Q0Increase in Total Revenue Q_1Q_0EA is more than the increase in total cost Q_1Q_0EB. Firm's gross profit will increase by an area ABE.
At Q_2 level of output MC is more than MP. Firm will reduce the level of output. By reducing the output, decrease in total cost Q_0Q_2FE is more than decrease in total revenue Q_0Q_2DE. Firm can increase the profit by reducing the output by an area EDF.
At output Q_0 MC=MP, firm gets maximum profits and is at equilibrium.

12. A consumer is in a state of equilibrium consuming two goods X and Y, with given price P_x and P_y respectively. Explain what will happen if:

MU_x/P_x is greater than MU_y/P_y .

P_y falls.

Consumer is at equilibrium when ration between MU and Price of goods are equal in each cases. MUx/Px must be equal to MUy/Py.

If MUx/Px>MUy/Py, consumer should buy more units of X so that MUx will come down and consumer should buy less units of Y so that MUy will increase till MUx/Px becomes equal to MUy/Py.

If Py falls MUy/Py will increase and become more than MUx/Px. Consumer should buy more units of Y and less units of X in such a way that MUx/Py becomes equal to MUy/Py

SECTION B

13. Financing the deficit in government budget through borrowing from the central bank by on the surety of government bond and securities is called deficit financing.

14. Export will increase

15. Dividend from public sector undertakings because it does not create any liability or reduce assets.

16. **R**evenue budget includes receipts and expenditure that do not influence assets and liabilities. Capital budget is the account of assets and liabilities of the government

17. **A.** Included because it is factor income from abroad.

B. Included because it is a factor income

C. Not included. It is transfer payment received.

18.

Income	Consumption	MPC	APS
500	100	-----	00.8
600	150	0.5	0.75
700	200	0.5	0.71
800	250	0.5	0.69
900	300	0.5	0.67

19. Ans: Y=1250; b=1-0.2=0.8; I=150; Let C*=Autonomous consumption
Y= C*+bY+I; 1250=C*+0.8x1250+150; 1250-1150=100. <u>C*=100</u>

OR

S=I; -C*+mps x Y = I ; -200+0.2 x Y=500; 0.2Y=700; Y=3500//

20. **Demand curve** of foreign exchange is downward sloping. Less foreign exchange is demanded at higher exchange rate and more foreign exchange is demanded at lower exchange rate. A rise in exchange rate will increase the rupee cost of foreign goods. Imports become costly so that less foreign exchange is demanded. A fall in price of foreign exchange will reduce the rupee cost of foreign goods. Imports will increase demand for foreign exchange increases.

21. **Fiscal Deficit:-** Fiscal Deficit is the difference between government's total expenditure and its total receipts excluding borrowings

Gross Fiscal Deficit = Total Expenditure—(Revenue Receipts +Non debt creating capital receipts)

Gross fiscal deficit will be equal to Net borrowing at home + Borrowing from RBI + Borrowing from abroad.

Implications of fiscal deficit are-

1. It indicates the total borrowing requirements of the government
2. It indicates how far government is living beyond its means.
3. It creates large burden of interest payment in future, which may further increase the revenue deficit.
4. Fiscal deficit is inflationary in nature because it increases money supply.

22. If aggregate demand for a level of output is less than the full employment level, then a situation of deficient demand exists

If AD for a level of output is less more than the full employment level, then excess demand exists

a. **Fiscal Policy measures to correct Deficient Demand**: Fiscal policy is the taxation and expenditure policy of the government. When there is deficient demand, aggregate demand should increase to the extend of deflationary gap. For this two fiscal policy measures are suggested.

i. Increasing the level of government expenditure:- An increasing the government expenditure equal to the amount of deflationary gap can push up the AD. Economy can restore the full employment equilibrium

ii. Reduction of Taxation: A reduction in taxes will increase the disposable income of the people. As a result consumption demand increased to the extend of MPC times of increase in disposable income. This increases AD.

Thus, a mix of increasing government expenditure and reduction of taxation can solve the problem of deficient demand.

b. Monetary Policy to correct Deficient Demand:-Monetary policy is the policy of the central Bank of a country by changing the money supply and credit. The aim of the monetary policy is to cause an increase or decrease in investment expenditure by firms. It can be done in two step manner

a. Increase in availability of credit:- This can be done by reducing the cash reserve ratio. This gives commercial banks greater ability and more resources to expand credit.
b. Lower interest rate:- This can be done by increasing money supply and by reducing Bank Rate. This increases the demand for investible fund.

Increased availability of credit and reduction of interest rate will increase the investment in the economy. Therefore, that AD demand can be pushed up to solve the problem of deficient demand.

Fiscal Policy measures to correct excess demand: Two important fiscal policy measures are

i. Reducing Government Expenditure- Government expenditure is a part of AD. Reduction in government expenditure equal to the inflationary gap will brig down the AD back to full employment level.
ii. Increasing Tax rate:- Increasing taxes will reduce the disposable income of the people Consumption expenditure decreases. Ad falls to eliminate inflationary gap.

Monetary Policy to correct inflationary Gap:-It operates through a reduction of investment demand by firms. It is possible by-

i. Increasing rate of interest:- At higher rate of interest investment demand will decrease.
ii. Reducing availability of credit by increasing cash reserve ratio and by raising Bank Rate.

OR

The problem of Excess Demand and Deficient Demand:-

The equilibrium level of income, output and employment is solely determined by AD. The economy will be in full employment equilibrium if AD is equal to full employment level of output. However, AD demand need not be always equal to the full employment level of output

If AD is for an amount of output less than the full employment level of output, then deficient demand arises. This leads to under employment equilibrium. This leads to deflationary gap.

If AD is for a level of output more than the full employment level of output, then it is known as excess demand. This leads to inflationary gap.

23. Open market operation: Buying and selling of government bonds and securities in the open market on behalf of the government to control money supply and credit creation.

When central bank sells government bonds, money from the economy and banks will flow to the hands of central bank. Money supply decreases. Banks have less resources to create credit.

When central bank purchases bonds and securities money flows into the economy and to the banking system. Money supply increases. Banks have more resources to create credit.

Reserve Ratio Requirement: Commercial banks have to keep certain percentage of their deposit liabilities in the form of cash and other designated liquid assets. There are two types of reserve that commercial banks have to keep

a. Cash Reserve ratio: It is that part of deposit liabilities that commercial bank have to keep as cash and designated liquid assets with themselves to meet the demand of depositors.

b. Statutory liquidity ratio: It is that part of deposit liabilities that commercial banks have to keep as cash with the central bank

   If these reserves are increased commercial banks have less resource to created credit. Money supply and credit creation will decrease. If these reserve are reduced commercials banks will have more resources to create credit. Credit creation and money supply will increase.

24. Private final consumption expenditure= GNPmp-Net factor income from abroad-Government final consumption expenditure-gross domestic capital formation-net exports
    6000-(-50)-1400-(1550+600)-500= 2000 cr.
    Net Factor income from abroad = Factor income received –factor income paid
    (-)50 = X - 200; X= Rs.150 cr

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